

# VIP2



VK2-1080(720)BIR3V9F

**Installation Guide**



## WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

## CAUTION



## EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## PRECAUTIONS

### Safety

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up.

### Installation

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.

The unit is not designed to be waterproof.

Exposure to rain or water may damage the unit.

**CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.**

## **CE COMPLIANCE STATEMENT**

**WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.**

# 1. Description

This manual applies to the VK2-1080BIR3V9F VK2-720BIR3V9F bullet cameras.

The VK2-1080(720)BIR3V9F are fully featured day/night IP bullet cameras with in built IR LEDs to provide 24/7 full HD images, with a remote zoom and focus set up function

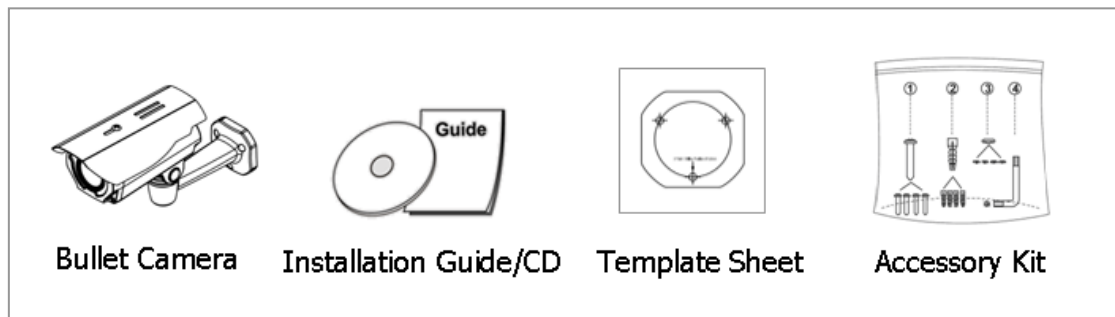
- **Installation Steps**

Follow these steps to install the VK2-1080(720)BIR3V9F on your local network (LAN):

1. Check the package contents against the list below.
2. Connect the Network Camera. See page 3.
3. Set an IP address. See page 6.
4. Set the password. See page 8.

- **Package Component**

The system comes with the following components:

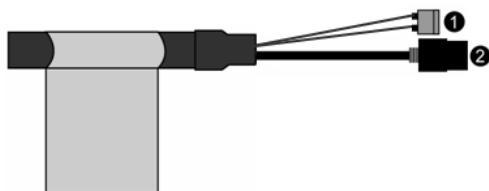


- **Contents in the installation CD**

1. The VK2-1080(720)BIR3V9F User's Manual
2. The SmartManager User's Manual
3. The VIP2 User's Manual
4. The SmartManager Installation software
5. The VIP2 Installation software

**Note:** Check your package to make sure that you received the complete system, including all components shown above.

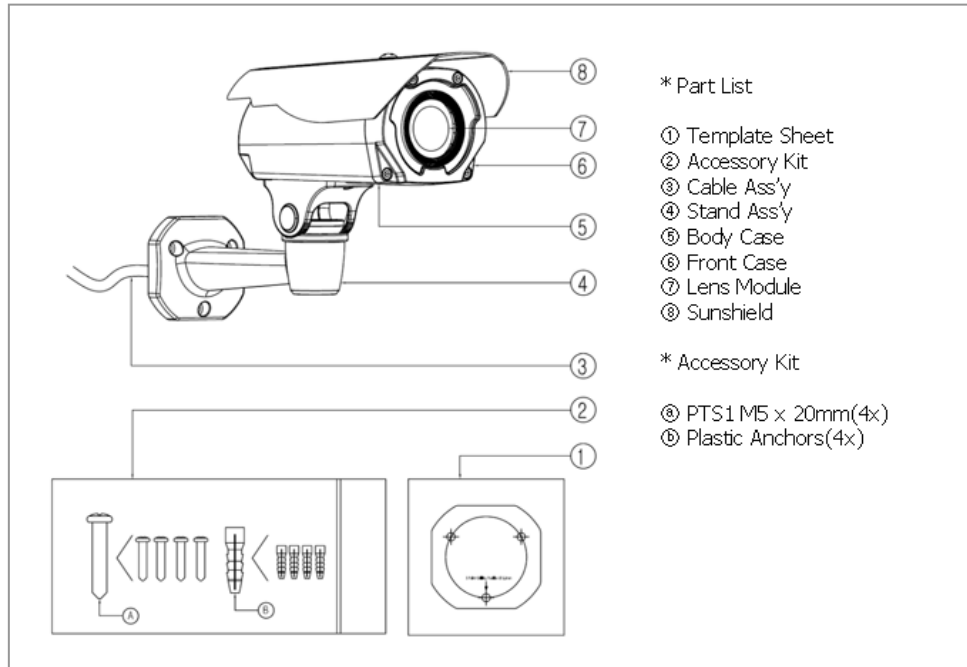
- **Connection Cable**



NO	Wire Colour	Description
1	Red: DC12V White: GND	Main Power, 2pin terminal, DC12V 700mA(8.4W), <b>Note: internal heater does not operate when using PoE, the camera needs to be powered by external 12Vdc for heater to operate.</b>
2	Black	Ethernet, RJ-45 port compatible with 10/100Mbps having PoE functionality. Modular Jack

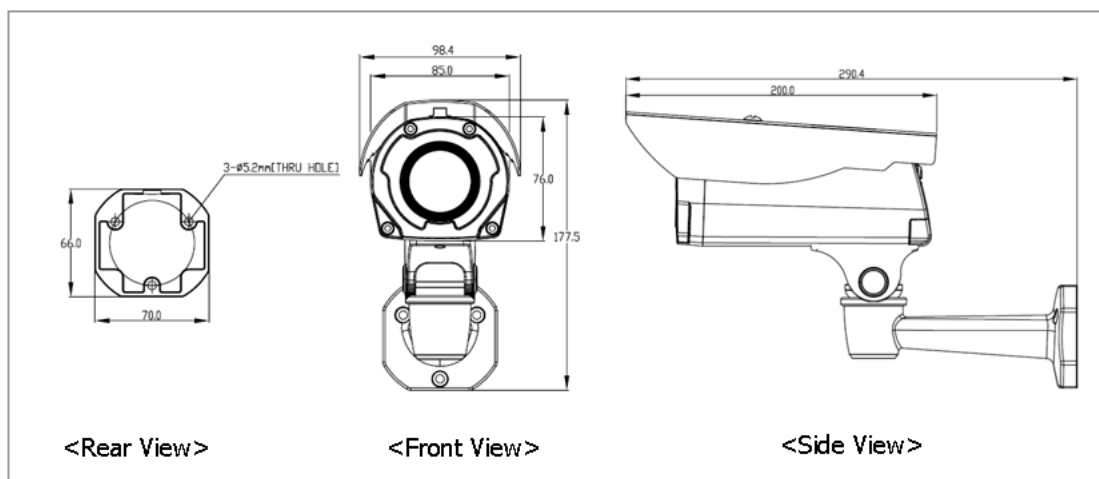
## ● Parts and Description

Carefully remove the contents from the box, and verify that nothing was damaged in shipment.



## ● Camera Dimension

See the diagrams below for the exact dimension of the VK2-1080BIR3V9F.



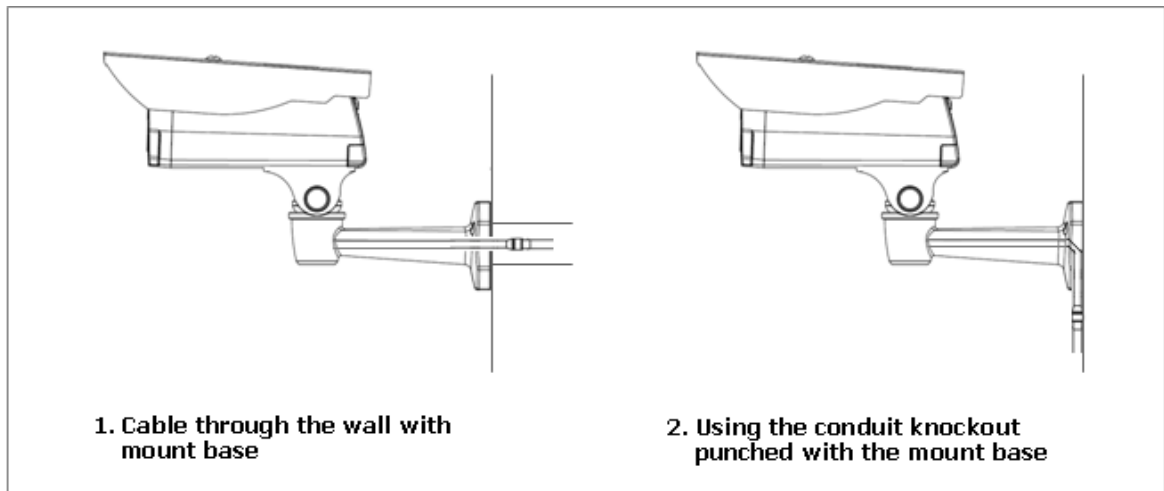
Dimensions Unit: mm

## 2. Installation

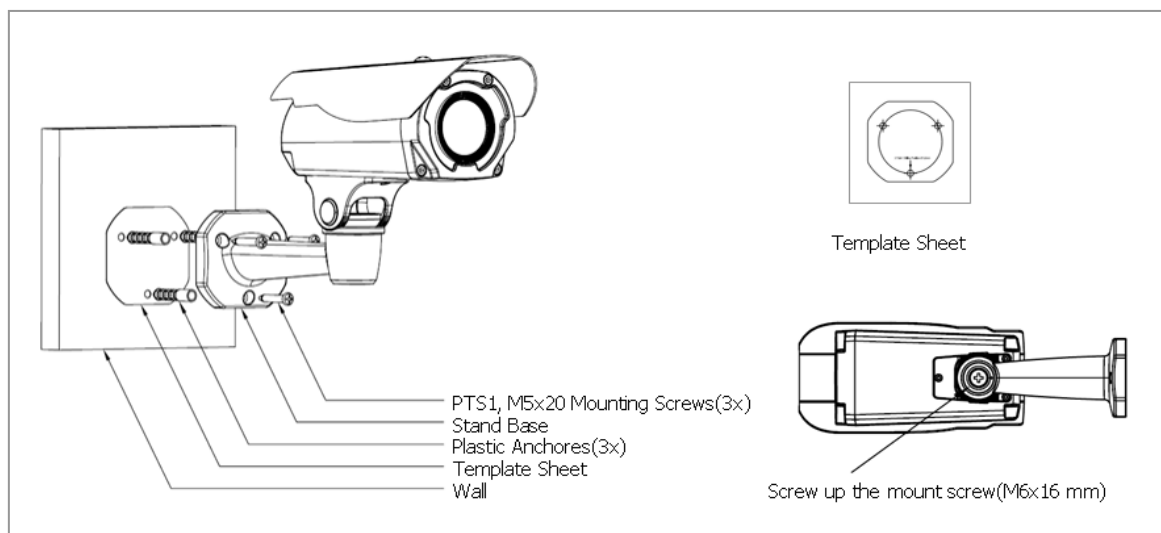
### 2.1 Camera mounting

- **Base Installation(Cable through the wall with the mount base)**

There are two ways of installing the camera.

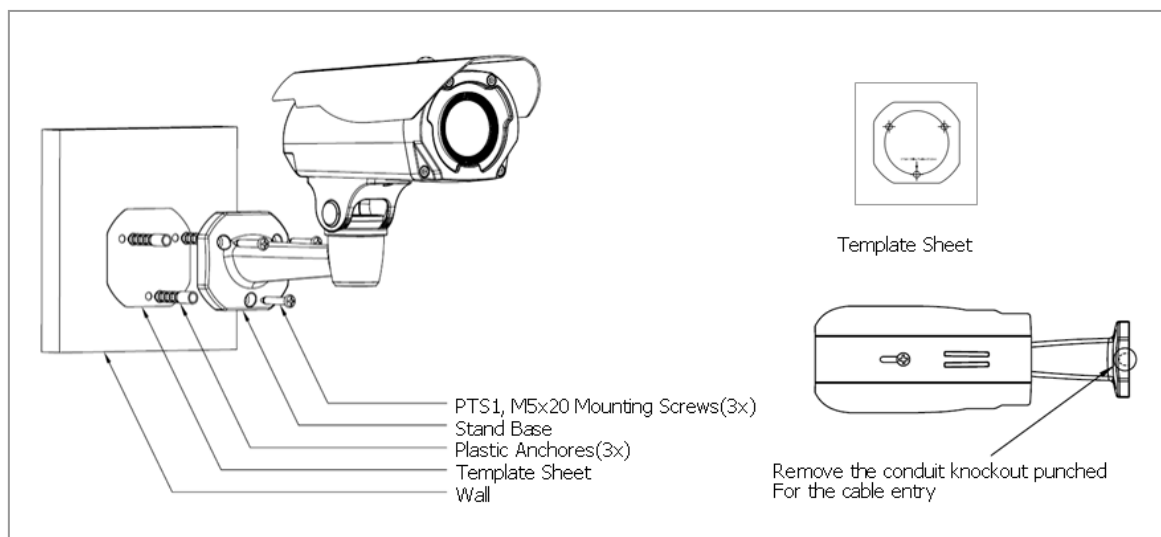


#### 1) Installation1 (Cable through the wall with the mount base)



- Drill the mounting location, using the template sheet (or the bottom of the mount base) as a template.
- Insert the plastic anchors into the drilled holes.
- Insert connection into drilled hole.
- Secure the camera to the wall using the supplied screws
- Adjust the camera orientation, and fasten the mount screws (M6x16) to fix the camera.

## 2) Installation 2 (Using the conduit knockout in bracket base)



- Drill the mounting location, using the template sheet (or the bottom of the mount base) as a template.
- Insert the plastic anchors into the drilled holes
- Insert connection into drilled hole.
- Secure the camera to the wall using the supplied screws
- Adjust the camera orientation, and fasten the mount screws (M6x16) to fix the camera.

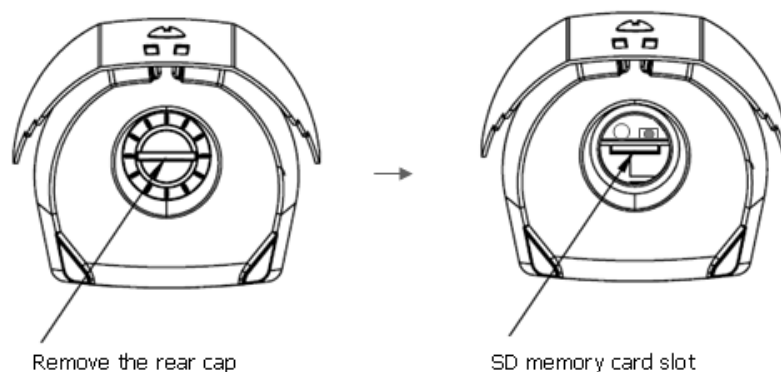
## 2.2 Connection

### • Connecting to the RJ-45

Connect a standard RJ-45 cable to the network port of the network camera. Generally a cross-over cable is used for directly connection to PC, while a direct cable is used for connection to a hub.

### Micro SD memory slot on the Rear Board

Remove the rear cap of the camera to insert the SD memory card.



### • Connecting the Power

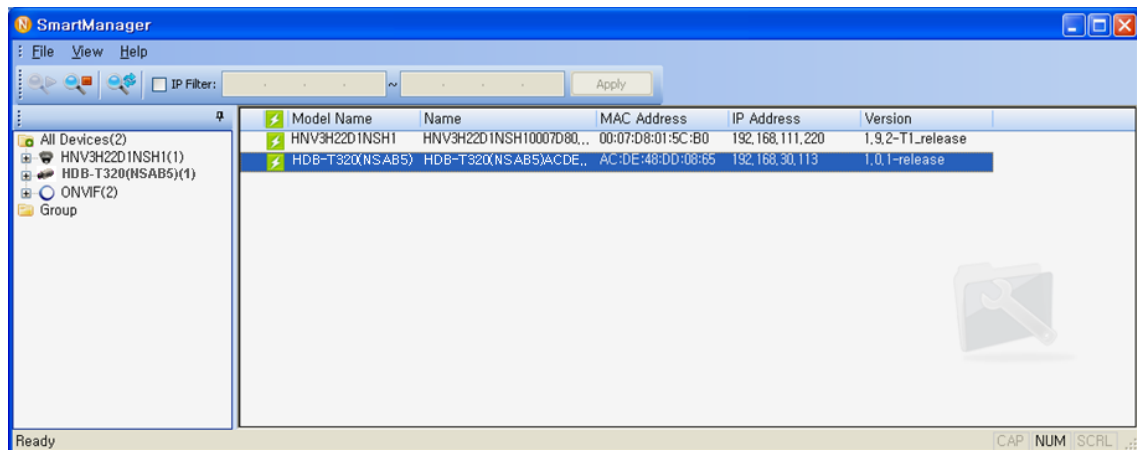
Connect the power of DC12V for the network camera. Connect the positive(+) pole to the '+' position and the negative(-) pole to the '-' position for the DC power. **Note: internal heater does not operate when using PoE, the camera needs to be powered by external 12Vdc for heater to operate.**



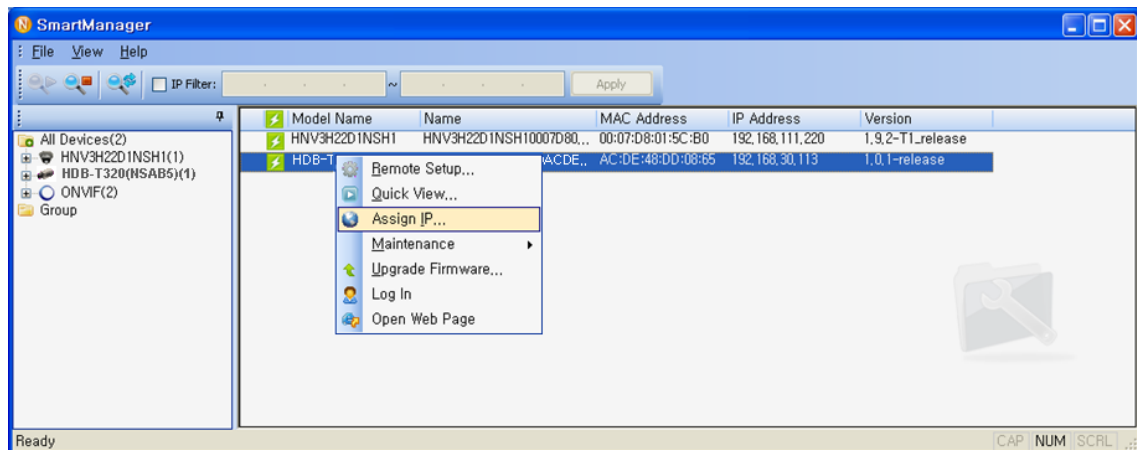
## 2.3 Network Connection and IP assignment

A standard straight network patch cable can be used to connect the camera to a switch or hub. Generally if connecting directly to a PC a crossover cable would be used.

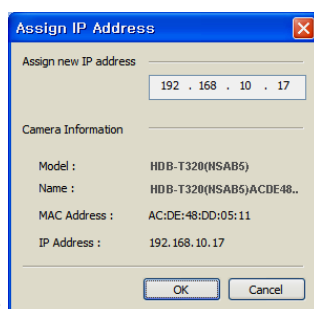
1. Connect the VK2-1080BIR3V9F/ device to the network and power up.
2. Start SmartManager utility found on the supplied CD (Start>All programs>SmartManager), the main window will be displayed, after a short while any network devices connected to the network will be displayed in the list.



3. Select the camera on the list and click right button of the mouse. You can see the pop-up menu below.



4. Select Assign IP. You can see a Assign IP window. Enter the required IP address.



## 3. Operation

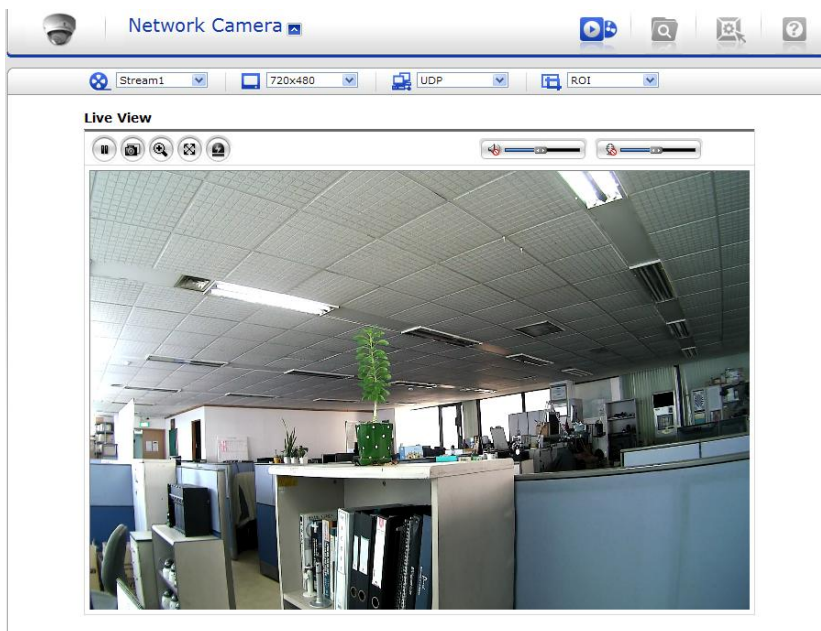
The VK2-1080(720)BIR3V9F can be used with Windows operating system and browsers. The recommended browsers are Internet Explorer, Safari, Firefox, Opera and Google Chrome with Windows.

### 3.1 Access from a browser

1. Start a browser (Internet Explorer).
2. Enter the IP address or host name of the VK2-1080(720)BIR3V9F in the Location/Address field of your browser.
3. The following page will be displayed. Click Live View or Setup to enter web page.



#### 4. Live View



### 3.2. Access from the internet

Access from the internet once connected, the VK2-1080BIR3V9F is accessible on your local network (LAN). To access the VK2-1080BIR3V9F from the Internet you must configure your broadband router to allow incoming data traffic to the camera. To do this, enable the NAT-traversal feature, which will attempt to automatically configure the router to allow access to the network camera. This is enabled from Setup > System > Network > NAT.

For more information, please see “3.5.5 System>Network>NAT” of User’s Manual.

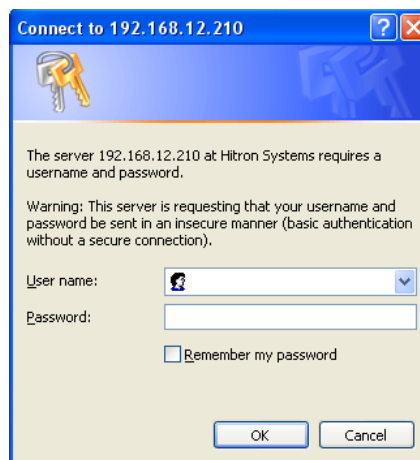
### 3.3 Set-up menu access

To gain access to the cameras set-up, a user name and password must be entered. As default:

User = admin

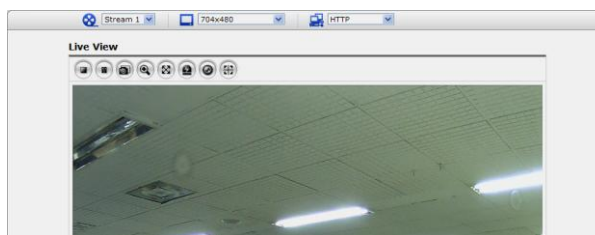
Password = admin

It is recommended that the Administrator password is changed immediately.







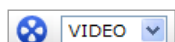
### 3.4 Live View Page

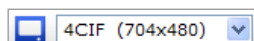
The live view page comes in eight screen modes: 1920x1080, 1280x1024, 1280x720, 720x480(576), 640x480, 352x240(288) and 320x240. Users are allowed to select the most suitable one out of those modes. Please, adjust the mode in accordance with your PC specifications and monitoring purposes.

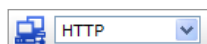


#### 1) General controls

 Live View Page  Search & Playback Page  Setup Page  Help Page









 The video drop-down list allows you to select a customized or pre-programmed video stream on the live view page. Stream profiles are configured under Setup > Basic Configuration > Video & Image. For more information, please see “3.5.1 Basic Configuration > Video & Image” of User’s Manual.

 The resolution drop-down list allows you to select the most suitable one out of video resolutions to be displayed on live view page.

 The protocol drop-down list allows you to select which combination of protocols and methods to use depends on your viewing requirements, and on the properties of your network.

## 2) Control toolbar

The live viewer toolbar is available in the web browser page only. It displays the following buttons:

-  The Stop button stops the video stream being played. Pressing the key again toggles the start and stop.
-  The Pause button pause the video stream being played.
-  The Snapshot button takes a snapshot of the current image. The location where the image is saved can be specified.
-  The digital zoom activates a zoom-in or zoom-out function for video image on the live screen.
-  The Full Screen button causes the video image to fill the entire screen area. No other window will be visible. Press the 'Esc' button on the computer keyboard to cancel full screen view.
-  The Manual Trigger button activates a pop-up window to manually start or stop an event.
-  The Remote Focus button enables users to adjust focus and zoom remotely via network.
-  The Smart Focus button readjusts focus automatically.

## 3) Video

The VK2-1080BIR3V9F provides several images and video stream formats. Your requirements and the properties of your network will determine the type you use.

The Live View page in the VK2-1080BIR3V9F provides access to H.264, MPEG-4 and Motion JPEG video streams, and to the list of available video streams. Other applications and clients can also access these video streams/images directly, without going via the Live View page.

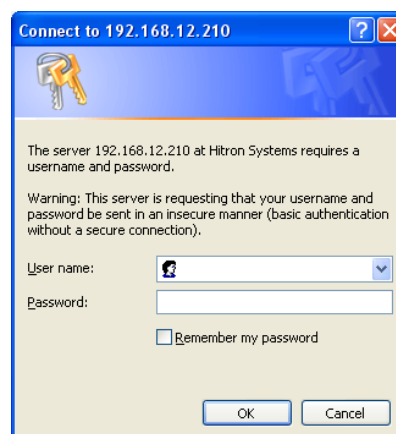
## 3.5 VK2-1080(720)BIR3V9F setup

This section describes how to configure the camera, and is intended for product Administrators, who have unrestricted access to all the Setup tools; and Operators, who have access to the settings for Basic, Live View, Video & Image, Audio, Event, and System Configuration.


You can configure the VK2-1080(720)BIR3V9F by clicking Setup in the top right-hand corner of the Live View page. Click on this page to access the online help that explains the setup tools

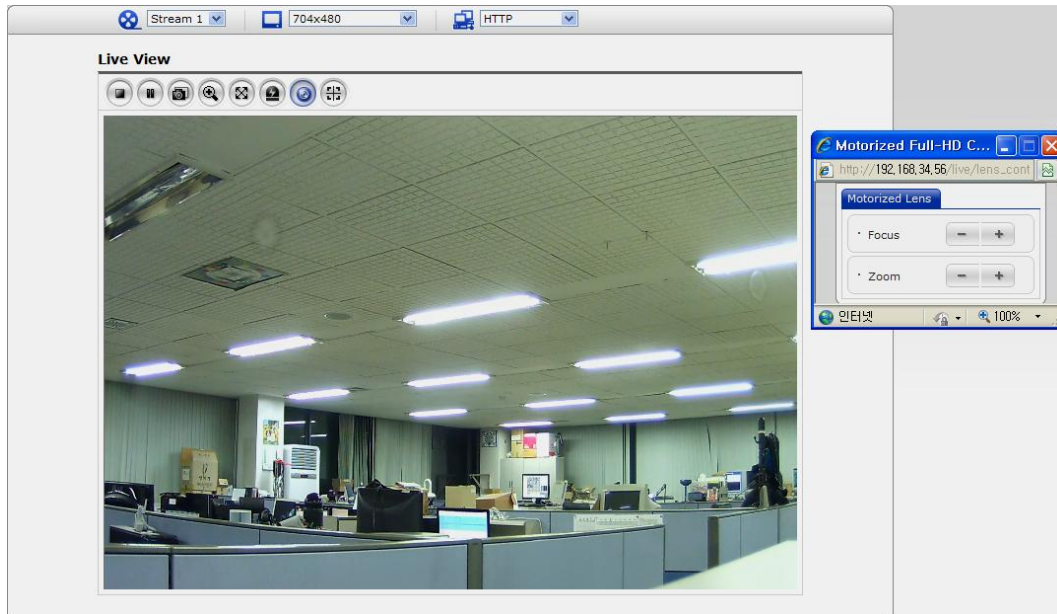
When accessing the VK2-1080BIR3V9F for the first time, the “Admin Password” dialog appears. Enter your admin name and password, set by the administrator.

Note: If the password is lost, the VK2-1080(720)BIR3V9F must be reset to the factory default settings.  
See “3.6 Resetting to the Factory Default Settings”.




#### 4) Focus and Zoom Control

You can control Zoom and Focus in the live screen. Press the  button on the left top in the live screen to activate the Zoom & Focus control panel.



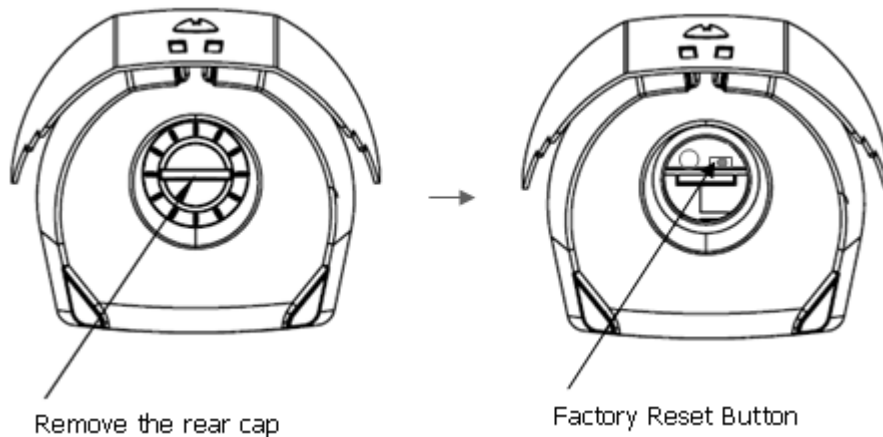
- Adjusting Zoom:  
Click “-” button to zoom out and click “+” button to zoom in.  
The focus is moved slightly after adjusting zoom; adjust the focus again, as necessary.
- Adjusting Focus:  
Click “-” button for far focus and click “+” button to near focus.

Note: Click the  button in the live screen to set the focus to the optimum position.

### 3.6 Resetting to the factory default settings

To reset the VK2-1080(720)BIR3V9F to the original factory settings, go to the Setup>System>Maintenance web page (described in “3.5.6 System>Maintenance” of the User’s Manual) or use the Reset button on the network camera, as described below:

Follow the instructions below to reset the VK2-1080BIR3V9F to the factory default settings using the Reset button.



1. Switch off the VK2-1080(720)BIR3V9F by disconnecting the power adapter.
2. Remove the rear cap of the camera.
3. Press and hold the Reset button with a straightened paperclip while reconnecting the power.
3. Keep the Reset button pressed for about 5 seconds.
4. Release the Reset button.
5. The VK2-1080(720)BIR3V9F resets to factory defaults and restarts after completing the factory reset.
6. Replace the rear cap of the camera.

**CAUTION:** When performing a Factory Reset, you will lose any settings you have saved.

### 3.7 More Information

For more information, please see the VK2-1080(720)BIR3V9F User’s Manual, which is available on the CD included in this package.

### 3.8 Specification

Main Item		Specification
C A M E R A	Image sensor	1/2.8" Progressive scan RGB CMOS
	Active Array	1920(H) x 1080(V)
	Lens	Motorized Varifocal 3.0mm ~ 9.0mm, F1.2, DC IRIS
	Angle of View	3.0mm – 93°(H) / 9.0mm – 31.7°(H)
	IR Distance	15m (with built-in 32 IR LEDs)
	Min. illumination	Colour: 2.5Lux, B/W: 0.0Lux (F1.2, 50IRE with IR On)
	Shutter Speed	1/20,000 ~ 1/4
N E T W O R K	Video Compression	Motion JPEG
	Video Resolutions	(VK2-1080BIR3V9F) : 320x240 ~ 1920x1080
	Frame Rate	25fps @ all resolutions
	Video Streaming	Simultaneously H.264(or MPEG-4) and MJPEG
	Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, QoS, FTP, SNMP, uPnP, RTP, RTSP, RTCP,
	Security	Multi-user authority, HTTPS, IP Filtering, Privacy Zone
	Max. Connection	10
	API Programming Interface	API Supported,
	Alarm Triggers	Motion Detection, External Input, Manual Trigger
	Alarm Events	File upload via FTP and HTTP
	Video Buffering	Pre and Post Alarm
	Motion Detection	Yes, max. 8 programmable zone
	Network Time Synchronization	Yes
	SD Recording	Yes, Continuous/Schedule/Event
	Software Reset	Yes
	Factory Reset	Yes, Button/Web browser
	Auto Recovery	Yes
	Installation Tool	SmartManager,
	Upgrade	Web browser, SmartManager, VK2-Client
	Ethernet	RJ-45 10BASE-T/100BASE-TX
	Video Output	BNC, 1.0 Vp-p (75ohm, composite)
	Auxiliary	Terminal, RS485 Tx+/Tx-
	Starting Temperature	-20°C ~ 50°C
	Operating Temperature	-30°C ~ 50°C (T.B.D)
	Operation Humidity	0~90% (non-condensing)
	Housing	Weather-proof IP66-rated housing
	Power Consumption	DC12V/PoE, 700mA
	Dimensions (W x H x D)	81.6mm x 68mm x 123.1mm
	Unit Weight	335g
	Approval	CE

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